

PROJECT DESCRIPTION

This project involves the installation of a new traffic control signal at MD 122 (Security Boulevard) and I-695 northbound ramp in Baltimore County. It also involves interconnect to Md 122 and Whitehead road and MD 122 and I-695 southbound ramp. MD 122 is assumed to run in a east-west direction.

INTERSECTION OPERATION

The intersection will operate in a NEMA two phase, full-actuated mode. The eastbound MD 122 left turn will flash RED until vehicles actuate the left turn signals. At that time the signals will show green arrows and the I-695 westbound signal heads will turn RED.

EQUIPMENT TO BE FURNISHED BY SHA

9086	1	EA	CABINET W/TELEMETRY (SYSTEM CAB), SIZE 6
9087	1	EA	CONTROLLER ASC II W/TELEMETRY
9089	15	SF	FLAT SHEET ALUM. SIGN-YELLOW, ORANGE, & SILVER (SF)
9090	10.5	SF	FLAT SHEET ALUM. SIGN-BLUE OR GREEN (SF)
9090	1	EA	23 FT STEEL POLE WITH 64 FT MAST ARM

EQUIPMENT TO BE FURNISHED AND/OR TO BE INSTALLED BY THE CONTRACTOR

1001	1	EA	MAINTENANCE OF TRAFFIC
5004	36	LF	FURNISH AND INSTALL 24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	5.4	CY	FURNISH AND INSTALL CONCRETE FOR POLE BASES
8003	1	EA	FURNISH AND INSTALL 14 FT PEDESTAL POLE
8016	2	EA	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FOOT LEAD-IN
8021	388	LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	39	LF	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	27	LF	FURNISH AND INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	380	LF	FURNISH AND INSTALL 3" SCHEDULE RIGID PVC CONDUIT - TRENCHED
8028	235	LF	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8029	110	LF	FURNISH AND INSTALL 3" SCHEDULE RIGID PVC CONDUIT - BORED
8030	40	LF	FURNISH AND INSTALL 4" SCHEDULE RIGID PVC CONDUIT - TRENCHED
8033	5	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	3	EA	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8039	1660	LF	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
8040	1983	LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8044	40	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8045	160	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8048	75	LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8049	50	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR (NO. 4 AWG) - THHN/THWN
8051	19.5	LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 X 6 INCH
8053	10.5	SF	INSTALL OVERHEAD SIGN
8052	12	SF	INSTALL GROUND MOUNTED SIGN
9074	1	EA	INSTALL MAST ARM POLE AND 64 FOOT MAST ARM
9084	9	EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION - BLACK FACE
9086	6	EA	FURNISH AND INSTALL 12 INCH OPTICALLY PROGRAMMED TRAFFIC SIGNAL HEAD - BLACK FACE

CONTACT LIST

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Mr. Joseph McMahon, Assistant District Engineer-Utilities
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Mr. Edward Rodenhizer, Chief
SHA Traffic Signal Shop
Phone: (410) 787-7650

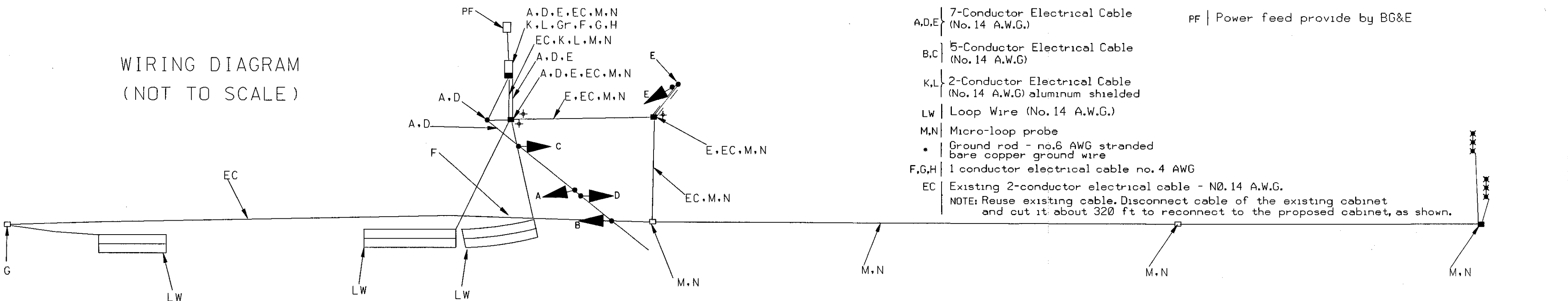
Mr. Richard Daff SR., Chief
Traffic Operations Division
Phone: (410) 787-7630

PHASE CHART

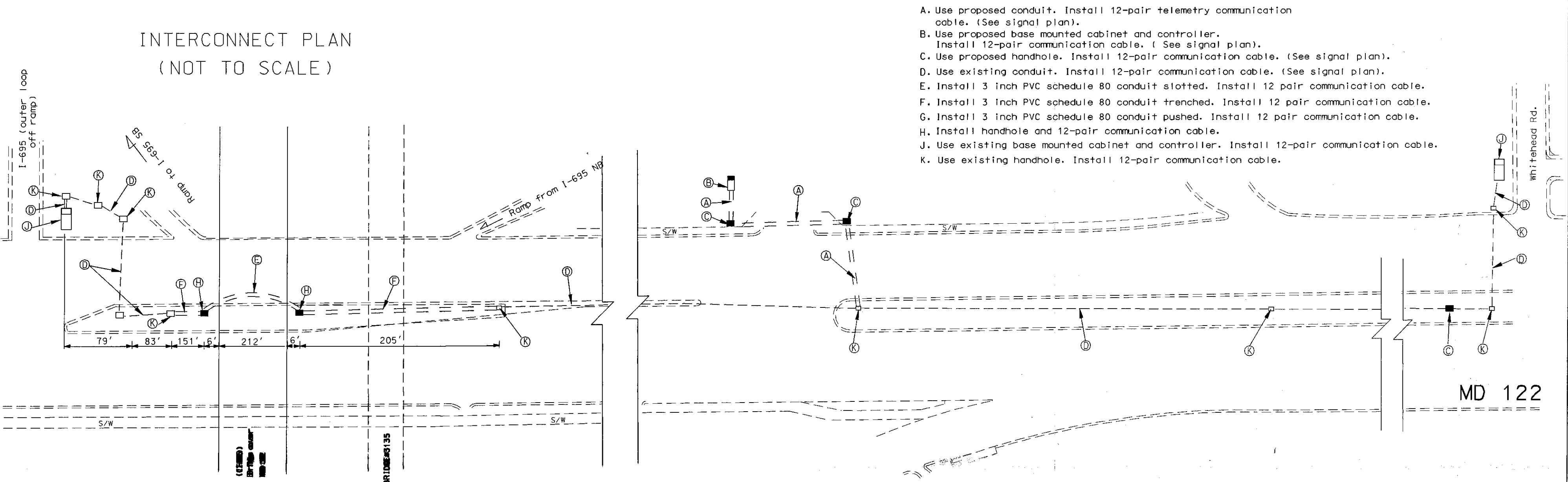
1	2	3	4	5
◀R	◀R	R	R	R
◀Y	◀Y	Y	Y	Y
◀G	◀G	G	G	G

Phase 1	◀G	◀G	R	R	G	
1 Change	◀Y	◀Y	R	R	Y	↻
Phase 2	◀R	◀R	G	G	R	←
2 Change	◀R	◀R	Y	Y	R	
Flashing	◀FL/R	◀FL/R	FL/Y	FL/Y	FL/R	↻
Operation	◀FL/R	◀FL/R	FL/Y	FL/Y	FL/R	+

WIRING DIAGRAM
(NOT TO SCALE)



INTERCONNECT PLAN
(NOT TO SCALE)



REVISIONS		APPROVALS		MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION GENERAL INFORMATION SHEET MD 122 AT NB I-695 RAMP	
		TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION		DRAWN BY: B. VAN DOORNIK	
		ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION		CHECKED BY: D. DODA	
		CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION		SCALE: NOT TO SCALE	
		DIRECTOR, TRAFFIC & SAFETY		DATE: 03/2001	
				F.L.A. NO. 4090	
				S.H.A. NO. 1005485	
				COUNTY: BALTIMORE	
				LOG MILES: 0201200.58	
				T.I.M.S. NO. E354	
				SHEET NO. 02 OF 02	